Sherwood Middle School Field Lighting

Date: March 21, 2014

TO: PLANNING DEPARTMENT

I. BACKGROUND

Applicant: City of Sherwood

22560 SW Pine Street Sherwood, OR 97140

Applicant's

Representative: Craig Sheldon, Public Works Director

Owner: Sherwood School District 88J

Attn: Robert Fagliano 23295 SW Main Street Sherwood, Oregon 97140.

<u>Site Address:</u> 21970 SW Sherwood Blvd

Tax Lots: 2S132BA00800 and 2S129CC10600

<u>Property Description</u>: The entire site is at the school campus of Hopkins Elementary and Sherwood Middle School.

Existing Development and Site Characteristics: The Sherwood Middle School site measures 15.25 acres and is currently developed with various school structures, paved surface parking and outdoor ball fields. The property is relatively flat and lacks significant natural resources or vegetation other than the maintained landscaping and sports fields. There are four outdoor lights currently surrounding the ball fields that were approved in 2005. (SP 04-012/ CUP 04-04 Middle School Lights)

Zoning Classification and Comprehensive Plan Designation: The property is zoned Institutional and Public (IP).

Adjacent Zoning and Land Use: The school properties are surrounded by residential districts, zoned High Density Residential to Medium Density Residential Low.

Land Use Review: This land use application proposal includes installation of two light fixtures at the turf field located on the school grounds. As proposed, the lights will illuminate the field after dark so the various sports teams may use it for extended play and practice. Section 16.82.010 of the Sherwood Zoning and Community Development Code requires a conditional use review in addition to site plan review due to the height of the lighting fixtures.

APPLICATION SUMMARY AND BACKGROUND INFORMATION

Application Summary

The applicant, City of Sherwood, requests a Conditional Use Permit for the addition of two (2), seventy foot high light fixtures to illuminate the fields at Sherwood Middle School. The lighting of the field will be used to extend practice field time. Only the City and School District staff will have access to the operation of the lights and the light timer will be inaccessible to those on the field. City Public Works staff will maintain the lighting apparatus and field.

Background Information

Tim Butts, of Musco Lighting, provided information on the proposed lighting fixtures that would be installed for the City and School District. He explained that the lights use a technology called "Light-Structure Green using less energy and requiring less maintenance. According to Mr. Butts, glare is reduced with these lights, and Musco Lighting guarantees its product. For example, if complaints were made that the lights violated the glare standards of the Code, Musco lighting would fix the problem and test the foot candle amount at the property line. Each fixture will have five separate luminaries with an aluminum spill and glare light control visor. See Applicant's Materials.

The fixtures at the Middle School would include two (2) pre-cast concrete bases, two (2)- seventy foot galvanized steel poles with a remote electrical component enclosure, pole length wire harness, ten factory aimed and assembled luminaries, and a control cabinet with a wireless operating control.

CONDITIONAL USE PERMIT REVIEW (SECTION 16.82)

No conditional use shall be granted unless each of the following is found:

A. All public facilities and services to the proposed use, including but not limited to sanitary sewers, water, transportation facilities, and services, storm drains, electrical distribution, park and open space and public safety are adequate; or that the construction of improvements needed to provide adequate services and facilities is

guaranteed by binding agreement between the applicant and the City.

All utilities including sanitary sewer, storm sewer, water and power are currently provided to the site. Electricity will be distributed to the poles via the current system. The lighting will increase the time that the fields can be utilized for recreational activities for the local sports teams. The applicant estimates that 1,500 children play a variety of sports in the Sherwood area. Daylight hours are especially limited during the winter months, and children are in school for most of the day; limiting available practice times. The lighting of the fields during the winter months allows for more children to play soccer and enjoy the facilities. As a result, the City residents gain a benefit in having the fields in use for longer hours of the day creating more flexibility in scheduling practice times. If the City attempted new construction of a field with lights, the amount would be cost prohibitive. This offers the City and the residents a less costly alternative.

The proposed lighting fixtures are designed as "Green Generation Luminaries". According to the lighting designer, this means that glare is reduced and fewer maintenance costs Full compliance with all public facility improvements is discussed further within this report. The site currently has adequate electricity and can be maintained in the same manner as the other facilities of the school grounds.

B. Proposed use conforms to other standards of the applicable zone and is compatible with abutting land uses in regard to noise generation and public safety.

The site is zoned Institutional and Public and is surrounded by other residential zones and uses. Parks and recreational facilities are a permitted use in this zone. The fields are used for both practice and games. Practices generally create little excess noise because there are fewer spectators. Participants at recreational events or team sports often make noise, but usually for a short duration of time. The City supplies no benches or formal seating surrounding the field, thus in effect limiting the size of crowds that could be more disruptive to the neighbors. Compliance with the applicable zone standards are discussed below.

C. The granting of the proposal will provide for a facility or use that meets the overall needs of the community and achievement of the goals and/or policies of the Comprehensive Plan, the adopted City of Sherwood Transportation System Plan and this Code.

Applicant's Response: The Sherwood Parks Board voted to support the proposal as they believe it meets the overall needs of the community by

providing adequate recreational facilities for its citizens. The City Council approved the field lighting as a budgetary item as well.

According to Lance Gilgan, Recreation Coordinator for the City approximately 1,500 kids will participate when you add soccer, football and lacrosse together. If baseball can get some extra practice time because of the new lights that number could go up by as much as 200 more children. These numbers are all approximate, of course. No one will have access to turn lights on and off except for the City of Sherwood and or the Sherwood School District.

The lights would be provided in winter months when necessary for practice and would be programmed to turn off. The team coaches would have no access to the lights. The City will have a key card device that automates the shut off the lights. The sports organizations will provide the City with a fee of for using and lighting the field.

D. Surrounding property will not be adversely affected by the use, or that the adverse effects of the use on the surrounding uses, the neighborhood, or the City as a whole are sufficiently mitigated by the conditions proposed.

Applicant's Response: The property owners along the northern and eastern side of the soccer fields may experience noise and a minimal amount of light spill with the addition of the two lights. The noise will be similar to the noises already experienced by the neighbors from football, baseball and soccer games and practices already being conducted. The lights will not make any additional noise, according to Tim Butts of Musco lighting. The property owners on the surrounding boundaries will be able to view the lights, but will not incur any spill onto their properties.

Several mitigation measures are already in place to reduce the noise that the fields may generate. Privacy fencing is installed around the properties. Landscaping is also provided along the perimeter to buffer the noise as well.

The applicant has considered other impacts and has proposed several mitigation measures to minimize the impacts. The poles will be located as far away from the rear lots of these neighboring properties as possible. The applicant is proposing only two poles to light the field. The poles will be a gray color to blend into the sky. The lights will have an automated system to turn off. The applicant's proposal states that the lighting used will be designed with fixtures using "Green Generation Luminaries" which keeps down maintenance costs and glare is reduced. According to the supplier's materials, the lighting is guaranteed to meet/or exceed the standards set forth in Code regarding Glare and Heat.

E. The impacts of the proposed use of the site can be accommodated considering size, shape, location, topography and natural features.

Applicant's Response: The applicant proposes two light poles that will not require a substantial change to the existing site. The site will not require any grading with the installation of poles and thus the impacts will be minimal to the topography. The site will not require removal of natural features and only several of the landscaped bushes will be removed.

F. The use as proposed does not pose likely significant adverse impacts to sensitive wildlife species or the natural environment.

Applicant's Response: The area under consideration already has a sport field and is developed. The surrounding area is fully developed.

G. For a proposed conditional use permit in the Neighborhood Commercial (NC), Office Commercial (OC), Office Retail (OR), Retail Commercial (RC), General Commercial (GC), Light Industrial (LI), and General Industrial (GI) zones, except in the Old Town Overlay Zone, the proposed use shall satisfy the requirements of Section 16.108.080 Highway 99W Capacity Allocation Program, unless excluded herein.

Applicant's Response: This site is located in the IP zone and therefore is not subject to the CAP requirements.

For wireless communication facilities, no conditional use permit shall be granted unless the following additional criteria is found:

- H. The applicant shall demonstrate to the satisfaction of the City that the wireless communication facility cannot be located in an IP zone due to the coverage needs of the applicant.
- I. The proposed wireless communication facility is designed to accommodate co-location or it can be shown that the facility cannot feasibly accommodate co-location.
- J. The applicant shall demonstrate a justification for the proposed height of the tower or antenna and an evaluation of alternative designs which might result in lower heights.
- K. The proposed wireless communication facility is not located within one-thousand (1,000) feet of an existing wireless facility or that the proposed wireless communication facility cannot feasibly be located on an existing wireless communication facility.

L. The proposed wireless communication facility is located a minimum of three-hundred (300) feet from residentially zoned properties.

Applicant's Response: The applicant is not proposing an antenna that serves in lieu of a new wireless communication facility. This antenna is proposed to attach to one of the proposed light fixtures that will add one foot to the light pole. This additional one foot in height will be indistinguishable from the other light poles. The pole and antenna, if installed will accommodate a co-location as it will be serving as a light and an antenna and will not require an entire wireless communication facility to be constructed. The City has an opportunity to place an antenna at a location that is high above existing facilities and can serve a large number of residences with little additional harm in terms of cost and views.

16.82.020(4) Additional Conditions

In permitting a conditional use or modification of an existing conditional use, additional conditions may be applied to protect the best interests of the surrounding properties and neighborhoods, the City as a whole, and the intent of this Chapter. These conditions may include but are not limited to the following:

A. Mitigation of air, land, or water degradation, noise, glare, heat, vibration, or other conditions which may be injurious to public health, safety or welfare in accordance with environmental performance standards.

Applicant's Response: Excessive air, land or water degradation is not anticipated to result from this proposal. The neighboring property owners may have glare from the lighting. However, the Code requires that the heat or glare is minimized to a standard of .5 candle foot at the property line. The lighting supplier also guarantees that these lights will result in meeting this applicable code section. Therefore, any glare will not be injurious to public health or safety based on these standards.

B. Provisions for improvement of public facilities including sanitary sewers, storm drainage, water lines, fire hydrants, street improvements, including curb and sidewalks, and other above and underground utilities.

Applicant's Response: No additional conditions beyond those already recommended within this report are necessary as there will be little to no effect on the infrastructure.

C. Increased required lot sizes, yard dimensions, street widths, and off-street parking and loading facilities.

Applicant's Response: The site is over 20 acres and this criterion is not necessary. The distance from the poles to the rear property line of the neighboring eastern properties is at least 250 feet, exceeding the five foot setback requirements already. This adequately addresses the proximity of the lighting to the neighboring property owners.

D. Requirements for the location, number, type, size or area of vehicular access points, signs, lighting, landscaping, fencing or screening, building height and coverage, and building security.

Applicant's Response: There is an existing parking lot that serves the school and sports fields The area is already landscaped with relatively few buildings and most of the active uses of the fields provide screening for neighboring property owners. The soccer field abuts the Springs Assisted Living facility and St. Francis Church properties to the east and several residential properties to the south. Adequate screening is provided for these properties via six foot privacy fences along with landscaping. The poles are at least 250 feet from the rear property lines of the neighboring properties. The lights are over 70 feet tall. There are limited mechanisms in place that could mitigate their stature. However, the applicant proposes to use the innovative technology that has been shown to minimize glare from the lights.

E. Submittal of final site plans, land dedications or money-in-lieu of parks or other improvements, and suitable security guaranteeing conditional use requirements.

Applicant's Response: The applicant will likely be conditioned to submit final site plans showing full compliance with conditions imposed as part of any decision made.

F. Limiting the number, size, location, height and lighting of signs.

Applicant's Response: No additional signs are proposed.

G. Requirements for the protection and preservation of existing trees, soils, vegetation, watercourses, habitat areas and drainage areas.

Applicant's Response: The applicant is not proposing to remove any trees with this development. There are no sensitive areas that will be impacted with the installation of the lighting fixtures as the applicant plans to place the poles near the sport field.

H. Requirements for design features which minimize potentially harmful environmental impacts such as noise, vibration, air pollution, glare, odor and dust.

Applicant's Response: The applicant will be conditioned to minimize potentially harmful environmental impacts such as glare under the applicable code section.

SITE PLAN REVIEW (SECTION 16.90)

4. Required Findings

No site plan approval shall be granted unless each of the following is found:

A. The proposed development meets applicable zoning district standards and all provisions of Divisions V, VI, VIII, and IX.

Applicant's Response: The applicable zoning district standards are discussed above under the "Division II- Land Use and Development" section, and the applicable provisions of Divisions V, VI, VIII, and IX as discussed in detail below.

B. The proposed development can be adequately served by services conforming to the Community Development Plan, including but not limited to water, sanitary facilities, storm water, solid waste, parks and open space, public safety, electric power and communications.

Applicant's Response: Adequate services including but not limited to water, sanitary facilities, storm water, solid waste, public safety, electric power and communications will not be altered with the addition of the lights. Parks and open space services will be extended as a result of the addition of the lights.

C. Covenants, agreements, and other specific documents are adequate, in the City's determination, to assure an acceptable method of ownership, management and maintenance of structures, landscaping and other on-site features.

Applicant's Response: The Sherwood School District owns the site and has a maintenance agreement with the City. Therefore, it can be assured that the structures will be adequately maintained. This criterion is not applicable.

D. The proposed development preserves significant natural features to the maximum feasible extent, including but not limited to natural drainageways, wetlands, trees, vegetation,

scenic views and topographical features, and conforms to the applicable provisions of Chapters 5 of the Community Development Code.

Applicant's Response: No natural features with the exception of some landscaped shrubs will be removed with the installation of the light fixtures. The soccer field abuts the eastern boundary of the school grounds and thus preserves the views for the residential properties. The two poles are not anticipated to block views due to the distance that the poles are away from the property lines and their elevation. Additionally steps have been taken to site the poles in locations that minimize the poles visibility to the adjoining property owners.

E. For a proposed site plan in the Neighborhood Commercial (NC), Office Commercial (OC), Office Retail (OR), Retail Commercial (RC), General Commercial (GC), Light Industrial (LI), and General Industrial (GI) zones, except in the Old Town Overlay Zone, the proposed use shall satisfy the requirements of Section 16.108.080 Highway 99W Capacity Allocation Program, unless excluded herein.

Applicant's Response: This site is zoned IP and not subject to the CAP.

F. For developments that are likely to generate more than 400 average daily trips (ADTs), or at the discretion of the City Engineer, the applicant shall provide adequate information, such as a traffic impact analysis or traffic counts, to demonstrate the level of impact to the surrounding street system. The developer shall be required to mitigate for impacts attributable to the project. The determination of impact or effect and the scope of the impact study shall be coordinated with the provider of the affected transportation facility.

Applicant's Response: The proposed development is not anticipated to generate more than 400 average daily trips.

- G. The proposed commercial, multi-family development, and mixeduse development is oriented to the pedestrian and bicycle, and to existing and planned transit facilities. Urban design standards shall include the following:
 - 1. Primary, front entrances shall be located and oriented to the street, and have significant articulation and treatment, via facades, porticos, arcades, porches, portal, forecourt, or stoop to identify the entrance for pedestrians. Additional

- entrance/exit points for buildings, such as a postern, are allowed from secondary streets or parking areas.
- 2. Buildings shall be located adjacent to and flush to the street, subject to landscape corridor and setback standards of the underlying zone.
- 3. The architecture of buildings shall be oriented to the pedestrian and designed for the long term and be adaptable to other uses. Aluminum, vinyl, and T-111 siding, metal roofs, and artificial stucco material shall be prohibited. Street facing elevations shall have windows, transparent fenestration, and divisions to break up the mass of any window. Roll up and sliding doors are acceptable. Awnings that provide a minimum 3 feet of shelter from rain shall be installed unless other architectural elements are provided for similar protection, such as an arcade.
- 4. As an alternative to the above standards G.1-3, the Old Town Design Standards (Chapter 16.162) may be applied to achieve this performance measure.

Applicant's Response: This proposal is for the addition of two light poles. This use is not commercial, multi-family or mixed-use in nature. Therefore, this standard does not apply.

Applicable Code Provisions

A. Division II- Land Use and Development

16. 36 Institutional and Public (IP)

16.36.020 Permitted Uses

G. Public recreational facilities, including but not limited to parks, playfields, sports and racquet courts, but excluding golf courses which are permitted conditionally.

Applicant's Response: The ball fields are considered a conditional use and the associated field lighting part of the conditional uses within this zone and discussed above.

16.36 Dimensional Standards

A. Lot Dimensions

Except as otherwise provided, required minimum lot areas and dimensions shall be:

Lot area	No minimum required
Lot width at front	25 feet
property line	

Lot width at building line	Varies from 50 -80 feet depending on type of housing
Front yard setback	None, except that when the lot abuts a residential zone or public park property, the setback shall be a minimum of 20 feet
Side yard setback	None, except that when the lot abuts a residential zone or public park property, the setback shall be a minimum of 20 feet.
Rear yard setback	None, except that when the lot abuts a residential zone or public park property, the setback shall be a minimum of 20 feet.
Height	Except as otherwise provided, the maximum height of buildings in the IP zone shall be 50 feet, except that structures within 100 feet of a residential zone shall be limited top the height requirements of that residential zone.

Applicant's Response: Because this lot does abut a residential zone, the front, side and rear yard setbacks apply. The light fixtures will be further than twenty (20) feet from the front property line and further than five (5) feet from the side and twenty (20) feet from the rear property lines. The fixtures meet the setback standards of the MDRL zone. The two poles will be at least 250 feet from the rear yards of the abutting properties on the eastern side of the ball fields.

Height

Applicant's Response: The light fixtures fall under the height restrictions of §16.62 Chimneys, Spires, Antennas, and Similar Structures and thus this section is not applicable.

16.62 Chimneys, Spires, Antennas, & Similar Structures

16.62.010 Heights

Except as otherwise provided, the height limits established by this Code shall not apply to chimneys, stacks, water towers, radio or television antennas, towers, windmills, grain elevators, silos, elevator penthouses, monuments, domes, spires, belfries, hangars, solar heating devices, and to wireless communication facilities two hundred (200) feet in height or less. (Ord. 97-1019 § 1; 86-851)

Applicant's Response: The lighting fixtures are similar in scope to the types of facilities envisioned in this Code section. The two light fixtures are most similar to an antenna or tower. Therefore the height requirement is applicable to this section. The proposed lights are 70 feet in height.

16.62.020 Permit Required

Notwithstanding Section 16.62.010, a conditional use permit shall be required for all such structures that exceed the height limitations of a zoning district, except as specifically otherwise permitted in that district.

Applicant's Response: This section is applicable and thus a conditional use permit is required and discussed earlier in this report.

B. DIVISION V - COMMUNITY DESIGN

The applicable provisions of Division 5 include: 16.90 (Site Planning), 16.92 (Landscaping), 16.94 (Off-street parking and Loading), and 16.96 (On-site Circulation), 16.98 (On-site storage). Compliance with the standards in these sections is discussed below.

Chapter 16.92 Landscaping 16.92.010 Landscape Plan

All proposed developments for which a site plan is required pursuant to § 16.90.020 shall submit a landscaping plan which meets the standards of this Chapter. All areas not occupied by structures, paved roadways, walkways, or patios shall be landscaped or maintained according to an approved site plan.

Applicant's Response: The applicant indicates that all areas not covered with structures, walkways, paved roadways and parking on the site will be landscaped. While the landscape plan only shows details on the portions of the site where improvements will be made, the school grounds comply with this standard and it is expected to continue to comply.

16.92.020 Landscaping Materials

1. Varieties

Required landscaped areas shall include an appropriate combination of evergreen or deciduous trees and shrubs, evergreen ground cover, and perennial plantings. Trees to be planted in or adjacent to public rights-of-way shall meet the requirements of this Chapter

Applicant's Response: The landscape plan provides a combination of trees, large and small shrubs, ground cover and lawn; therefore, this standard is satisfied.

3. Non-Vegetative Features

Landscaped areas as required by this Chapter may include architectural feature interspersed with planted areas, such as

sculptures, benches, masonry or stone walls, fences, rock groupings, bark dust, semi-pervious decorative paving, and graveled areas. Impervious paving shall not be counted as landscaping. Artificial plants are prohibited in any required landscaped area.

Applicant's Response: The applicant is not proposing any non-vegetative or artificial features considered under this section. Therefore this standard is satisfied.

4. Existing Vegetation

All developments subject to site plan review as § 16.90.020 and required to submit landscaping plans as per § 16.92.020 shall preserve existing trees, woodlands and vegetation on the site to the maximum extent possible, as determined by the Review Authority, in addition to complying with the provisions of § 16.142.060, and Chapter 16.144

Applicant's Response: The applicant proposes to preserve the existing trees and landscaped within the school site and there are no trees that will be disturbed with this development.

16.92.030 Landscaping Standards

1. Perimeter Screening and Buffering

A minimum six (6) foot high sight-obscuring wooden fence, decorative masonry wall, or evergreen screen shall be required along property lines separating single and two-family uses from multi-family uses, and along property lines separating residential zones from commercial or industrial uses. For new uses adjacent to inventoried environmentally sensitive areas, screening requirements shall be limited to vegetation only so as to preserve wildlife mobility. In addition, plants and other landscaping features may be required by the Review Authority in locations and sizes necessary to protect the privacy of residences and buffer any adverse effects of adjoining uses.

Applicant's Response: As discussed previously in this report the current buffers are sufficient to protect the privacy of the residences and buffer and adverse effects of the adjoining uses.

C. DIVISION VI. - PUBLIC IMPROVEMENTS

Applicant's Response: The applicant is not proposing or required to complete any public improvements to the site; therefore the public improvement section is not addressed in further detail.

D. DIVISION VII. ENVIRONMENTAL RESOURCES

Chapter 16.142 - Parks and Open Space

16.154 Heat and Glare

Except for exterior lighting, all otherwise permitted commercial, industrial, and institutional uses shall conduct any operations producing excessive heat or glare entirely within enclosed buildings. Exterior lighting shall be directed away from adjoining properties, and the use shall not cause such glare or lights to shine off site in excess of one-half (0.5) foot candle when adjoining properties are zoned for residential uses.

Applicant's Response: The applicant is proposing exterior lighting that includes two, 70 foot high light poles that will illuminate the sports field in the early evening hours. In speaking with the representative from the lighting company about glare concerns, it was explained that the two lights will utilize "Light Structure Green" technology by Musco Lighting. This lighting technique will minimize off-site spill and glare light on adjacent property as demonstrated in the previously mentioned Exhibits.